

## STATE OF NEW MEXICO BEFORE THE WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF:

PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC

No. WQCC 20-51 (R)

# TRIAD NATIONAL SECURITY, LLC AND THE UNITED STATES DEPARTMENT OF ENERGY'S NOTICE OF INTENT TO PRESENT TECHNICAL TESTIMONY

Triad National Security, LLC ("Triad") and the United States Department of Energy, National Nuclear Security Administration ("DOE") (collectively "LANL"), pursuant to 20.1.6.202.A NMAC and the Procedural Order, issued November 9, 2020, submit this Notice of Intent to Present Technical Testimony.

## 1. LANL's Recommended Modification to the Proposed Regulatory Change.

LANL's proposed modifications to the New Mexico Environment Department's ("NMED") proposed regulatory changes 20.6.4 NMAC, as provided in NMED's Amended Petition of March 12, 2021, are attached as LANL Exhibit 1. Most of the proposed modifications were identified in LANL's Comments on the Public Comment Draft of the New Mexico Environment Department's Proposed Amendments to Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC, submitted in this case on January 6, 2021, or proposed to the WQCC in LANL's-Petition for Rulemaking to Amend 20.6.4, WQCC No. 21-16, filed March 12, 2021.

## 2. <u>Technical Witnesses for LANL</u>.

LANL expects to offer the following technical witnesses at hearing, all of whom will testify on behalf of LANL:

- a. Dr. Richard Meyerhoff
- b. Robert Gallegos
- c. Timothy Goering
- d. Dr. B. Dail
- e. Barry Fulton
- f. Dr. John Toll
- g. David DeForest

## 3. Direct Testimony Copies and Estimated Duration of the Direct Testimony.

A copy of the direct testimony of each LANL technical witness identified above is attached and designated LANL Exhibits 2-8. LANL anticipates that the duration of each witness's direct oral testimony will be approximately 30 minutes.

## 4. Qualifications of Technical Witness, Including Educational and Work Background Descriptions.

The qualifications, including educational and work background of each of the LANL technical witnesses, are described in detail in the pre-filed direct testimony of each witness. A summary for each LANL technical witness is provided here:

## a. Dr. Richard Meyerhoff

Dr. Meyerhoff received a Bachelor of Science degree in Biology from Baylor University in 1981 and earned a Master of Science Degree in Biology from Baylor University, in 1984. He earned a PhD in Aquatic Ecology from Oregon State University in 1991. Dr. Meyerhoff is currently employed by GEI Consultants, Inc. ("GEI") as a Senior Water Quality Specialist in Denver, CO. He has held this position since August 1, 2017. From 1991 to 1997, Dr. Meyerhoff was employed by the Arizona Department of Environmental Quality as a Manager of the group overseeing the Arizona Triennial Review. From 1997 to 2000, he was employed as an

environmental consultant at EcoPlan Associates in Mesa, AZ. From 2000 to 2017, he was employed as a project manager and, ultimately as a Vice President by CDM Smith in Phoenix, Arizona and Denver, Colorado. A copy of his resume is attached and designated LANL Exhibit 9.

### b. Robert Gallegos

Mr. Gallegos received a Bachelor of Science degree in Biology from New Mexico State University in 1982 and earned a Master of Science Degree in Biology from New Mexico State University in 1984. During his thirty-six year professional career, Mr. Gallegos has focused on water quality matters and worked in a variety of positions related to drinking water and water quality evaluation and protection, with increasing responsibilities. Mr. Gallegos is currently employed by Triad as an Environmental Professional at Los Alamos National Laboratory. He has held that position for the last ten years. Prior to this, he was an adjunct professor from 2010 to 2012 at the Santa Fe Community College. From 2003 to 2010, Mr. Gallegos was employed as an Environmental Compliance Specialist at the City of Santa Fe Public Utility Department. From 1985 to 2003, he was employed by the NMED in the Drinking Water Bureau. A copy of his resume is attached and designated LANL Exhibit 10.

## c. Timothy Goering

Mr. Goering received a Bachelor of Arts degree in Environmental Science from the University of Virginia and a Master of Science degree in Hydrology and Water Resources from the University of Arizona. Mr. Goering has worked for more than 35 years in the environmental field, with most of his work experience is in hydrology and in environmental characterization and remediation. He is currently employed by Triad as an Environmental Professional in the Environmental Protection and Compliance Division at Los Alamos National Laboratory. In

2020, Mr. Goering joined LANL's Environmental Protection and Compliance group as an Environmental Professional. From 2018 to 2020, he worked for LANL's Earth Systems Observation Group, as a Site operations manager for one of the DOE's atmospheric observatories, the Atmospheric Radiation Measurement Mobile Facility One. From 2013 to 2018, he was the technical lead for the RDX Remediation Project, leading a team of scientists to assess high explosives contamination in surface water and groundwater. From 2007 to 2015, he served as the technical lead for the Interim Facility-Wide Groundwater Monitoring Program. Since 2007, Mr. Goering has worked at LANL on a variety of environmental-related projects, with much of the work related to groundwater and surface water characterization and monitoring. From 1992 to 2007, he worked at Sandia National Laboratories as a subcontractor providing hydrogeological technical support for characterization and corrective action at Sandia's Mixed Waste Landfill. From 1987 to 1992, he worked for Jacobs Engineering as a site hydrologist for the DOE's Uranium Mill Tailings Remedial Action Program. In 1983, he began working for the environmental consulting firm Ecology and Environment Inc. conducting field assessments of hazardous waste sites. While in graduate school at the University of Arizona, he worked for another environmental consulting company on a large-scale water resource evaluation of the Little Colorado River Basin in Arizona. A copy of his resume is attached and designated LANL Exhibit 11.

### d. Dr. D. Bryan Dail

Dr. Dail received a Bachelor of Science degree in Biology (Chemistry minor) from the University of New Mexico in 1991 and earned a Ph.D.in Microbiology, with an emphasis on the biogeochemical cycling of nutrients and pollutants, from the University of Georgia in 1997. In 2000, he completed a postdoctoral appointment at the Pennsylvania State University studying

nitrogen cycling in Harvard University's Long Term Ecological Research Site, Harvard Forest, Petersham, Massachusetts. Dr. Dail is currently employed by Newport News Nuclear BWXT-Los Alamos ("N3B"), the Department of Energy Office of Environmental Management remediation contractor at LANL, as an Environmental Scientist. Prior to being employed by N3B, Dr. Dail was an environmental Scientist for five years with NMED's Surface Water Quality Bureau. From 2000 to 2012, Dr. Dail was an Assistant Professor, then Research Professor, in the Plant, Soil and Environmental Sciences Department at the University of Maine. A copy of his resume is attached and designated LANL Exhibit 12.

### e. Barry A. Fulton

Mr. Fulton received a Bachelor of Arts degree in Environmental Science and Ecology from Brevard College in 2005 and received a Master of Science in Environmental Toxicology from Baylor University in 2008. He has over sixteen years of experience in surface water quality and regulations, environmental toxicology, hydrology, and ecological risk assessment. In 2017, he formed Benchmark Environmental LLC, located in McCall, Idaho, where he is currently Principal Scientist and Owner. From 2009-2017, he was an environmental consultant at Arcadis, U.S. From 2006-2009, he was a research scientist at Baylor University's Center for Reservoir and Aquatic Systems Research Center. From 2004-2005, Mr. Fulton was a Biology and Environmental Science laboratory instructor at Brevard College. A copy of his resume is attached and designated LANL Exhibit 13.

#### f. Dr. John Toll

Dr. Toll received a Bachelor of Science degree in Chemical Engineering from the University of Iowa in 1983, and a PhD in Engineering & Public Policy from Carnegie Mellon University in 1989. Dr. Toll has been with Windward Environmental LLC ("Windward") since

2006. He became a partner in the firm in 2007 and managing partner in 2020. From 2004-2006, he worked independently under the name Toll Environmental LLC. From 1996-2004, Dr. Toll was a senior consultant with Parametrix, Inc. From 1993-1996, he was a senior consultant with EBASCO Environmental, which during my tenure was sold to Enserch Environmental and then to Foster Wheeler, Inc., becoming Foster Wheeler Environmental. From 1989-1993, he was an assistant professor of Environmental and Resource Engineering at the State University of New York, College of Environmental Science and Forestry. A copy of his resume is attached and designated LANL Exhibit 14.

#### g. David DeForest

Mr. DeForest received a Bachelor of Science degree in Environmental Science from Western Washington University. He is an environmental toxicologist with over 25 years of experience in aquatic toxicology, hazard assessment, ecological risk assessment, and water quality criteria. He is a Partner and Environmental Toxicologist at Windward. Prior to his employment with Windward, he was employed by Parametrix, Inc. for 15 years as an Environmental Toxicologist. He is also a member of the Society of Environmental Toxicology and Chemistry and has over 35 water quality-related peer-reviewed publications, including 30 publications related to the aquatic toxicology of metals, which is the subject of my testimony in this proceeding. A copy of his resume is attached and designated LANL Exhibit 15.

Pursuant to the Hearing Officer's scheduling orders, the LANL technical witnesses identified above may also submit rebuttal technical testimony and exhibits on or before June 22, 2021. Depending on the issues raised in the direct technical testimony filed in this matter, additional rebuttal witnesses may be disclosed. Such rebuttal testimony would address the direct technical testimony filed by NMED and other parties concerning NMED's proposed WQS changes, as well as WQS changes proposed by others (if any).

## 5. Exhibits

In addition to the attachments identified above and designated LANL Exhibits 1-15, LANL intends to offer additional exhibits at the hearing. The full index of LANL exhibits includes:

Reference	Exhibit Title	Bates Range
LANL Exhibit 1	Proposed Changes	2020 TR LANL-00001 to
		00020
LANL Exhibit 2	Testimony of R. Meyerhoff	2020 TR LANL-00021 to
		00057
LANL Exhibit 3	Testimony of R. Gallegos	2020 TR LANL-00058 to
		00101
LANL Exhibit 4	Testimony of T. Goering	2020 TR LANL-00102 to
		00137
LANL Exhibit 5	Testimony of B. Dail	2020 TR LANL-00138 to
		00163
LANL Exhibit 6	Testimony of B. Fulton	2020 TR LANL-00164 to
		00182
LANL Exhibit 7	Testimony of J. Toll	2020 TR LANL-00183 to
		00195
LANL Exhibit 8	Testimony of D. DeForest	2020 TR LANL-00196 to
		00206
LANL Exhibit 9	Resume of R. Meyerhoff	2020 TR LANL-00207 to
		00213
LANL Exhibit 10	Resume of R. Gallegos	2020 TR LANL-00214 to
		00217
LANL Exhibit 11	Resume of T. Goering	2020 TR LANL-00218 to
		00221
LANL Exhibit 12	Resume of B. Dail	2020 TR LANL-00222 to
		00227
LANL Exhibit 13	Resume of B. Fulton	2020 TR LANL-00228 to
		00236
LANL Exhibit 14	Resume of J. Toll	2020 TR LANL-00237 to
		00241
LANL Exhibit 15	Resume of D. DeForest	2020 TR LANL-00242 to
		00255
LANL Exhibit 16	Hearing Officers Report, Statement of Reasons	2020 TR LANL-00256 to
	for Amendment of Standards (May 13, 2005)	00359
	(WQCC 03-05(R))	

Reference	Exhibit Title	Bates Range
LANL Exhibit 17	EPA Triennial Review Letter to NMED (Dec. 29, 2006)	2020 TR LANL-00360 to 00363
LANL Exhibit 18	NMED Use Attainability Analysis (Aug. 2007)	2020 TR LANL-00364 to 00380
LANL Exhibit 19	EPA Letter to NMED Approving Revisions to New Mexico's Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC (Aug. 31, 2007)	2020 TR LANL-00381 to 00383
LANL Exhibit 20	Excerpt from NMED Petition (Aug. 15, 2003)	2020 TR LANL-00384 to 00387
LANL Exhibit 21	Excerpt from LANL Petition (Sept. 5, 2003) (WQCC 03-05(R))	2020 TR LANL-00388 to 00393
LANL Exhibit 22	Excerpt from NMED Revised Petition (Oct. 1, 2003) (WQCC 03-05(R))	2020 TR LANL-00394 to 00398
LANL Exhibit 23	Excerpt Direct Testimony, Dr. Frederick M. Fisher, 2003 Triennial Review Public Hearing (WQCC 03-05(R))	2020 TR LANL-00399 to 00412
LANL Exhibit 24	Excerpt EPA Triennial Review Record of Decision, Attachment to December 29, 2006 Letter	2020 TR LANL-00413 to 00421
LANL Exhibit 25	Michael Saladen Rebuttal Testimony, 2013 Triennial Review (Feb. 13, 2015) (WQCC 14-05 (R))	2020 TR LANL-00422 to 00439
LANL Exhibit 26	Excerpt EPA 2009 Triennial Review Record of Decision (Apr. 12, 2011)	2020 TR LANL-00440 to 00446
LANL Exhibit 27	2017 EPA Letter with Amended TSD (Jun. 8, 2017)	2020 TR LANL-00447 to 00501
LANL Exhibit 28	Amigos' Bravos 2014 Proposed Amendments and Statement of Basis Excerpt (WQCC 14-05 (R))	2020 TR LANL-00502 to 00504
LANL Exhibit 29	Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC (Oct. 9, 2015)	2020 TR LANL-00505 to 00511
LANL Exhibit 30	Affidavit of M. Saladen	2020 TR LANL-00512 to 00531
LANL Exhibit 31	80 Fed. Reg. 51,020 (Aug. 21, 2015)	2020 TR LANL-00532 to 00563
LANL Exhibit 32	EPA Letter to State of Oklahoma Water	2020 TR LANL-00564 to

Reference	Exhibit Title	Bates Range
	Resources Board (Sept. 5, 2008)	00576
LANL Exhibit 33	EPA Memorandum (Mar. 13, 2006)	2020 TR LANL-00577 to 00579
LANL Exhibit 34	Draft EUA Work Plan (Oct. 2020)	2020 TR LANL-00580 to 00610
LANL Exhibit 35	LANL Comments on Draft EUA Work Plan (LA-UR-20-29528)	2020 TR LANL-00611 to 00612
LANL Exhibit 36	Chronology of Joint Stipulated Activities	2020 TR LANL-00613 to 00618
LANL Exhibit 37	Map of HP Assessment Sites and Proposed Changes (LA-UR-20-30297)	2020 TR LANL-00619 to 00620
LANL Exhibit 38	Data Compilation: Pajarito Canyon from 0.5 miles below Arroyo de la Delfe to Homestead Spring (LA-UR-21-24106; LA-UR-21-24107)	2020 TR LANL-00621 to 00661
LANL Exhibit 39	Data Compilation: Arroyo de la Delfe Canyon from Confluence with Pajarito to Kieling Spring (LA-UR-21-24109)	2020 TR LANL-00662 to 00683
LANL Exhibit 40	Data Compilation: Effluent Canyon from Confluence with Mortandad to Headwaters (LA- UR-21-24094)	2020 TR LANL-00684 to 00697
LANL Exhibit 41	Data Compilation: S-Site Canyon from Alluvial Well MS 16-06293 to Martin Spring (LA-UR- 21-24119)	2020 TR LANL-00698 to 00718
LANL Exhibit 42	Data Compilation: Twomile Canyon from E244 to Confluence with Upper Twomile Canyon (LA-UR-21-24110; LA-UR-21-24111; LA-UR-21-24112; LA-UR-21-24113)	2020 TR LANL-00719 to 00788
LANL Exhibit 43	Proposed Segment Summary Sheets (LA-UR-21-24140)	2020 TR LANL-00789 to 00792
LANL Exhibit 44	E.R. Hedman and W.R. Osterkamp, Streamflow Characteristics Related to Channel Geometry of Streams in Western United States, U.S. Geologic Survey Water Supply Paper 2193 (1982)	2020 TR LANL-00793 to 00814
LANL Exhibit 45	NMED Settlement Agreement (Apr. 1993)	2020 TR LANL-00815 to 00824
LANL Exhibit 46	Amendment to NMED Settlement Agreement (Jan. 1996)	2020 TR LANL-00825 to 00829

Reference	Exhibit Title	Bates Range
LANL Exhibit 47	Excerpt of Order and Statement of Reasons for Amendment of Standards, (Oct. 2010) (WQCC 08-13)	2020 TR LANL-00830 to 00834
LANL Exhibit 48	NMED Rebuttal Testimony 2013 Triennial Review, (Feb. 13, 2015) (WQCC 14-05 (R))	2020 TR LANL-00835 to 00852
LANL Exhibit 49	US EPA Website, Chemicals of Emerging Concern in the Columbia River	2020 TR LANL-00853 to 00856
LANL Exhibit 50	White Paper Aquatic Life Criteria for Contaminants of Emerging Concern Aquatic Life Criteria for Contaminants of Emerging Concern: Part I Challenges and Recommendations (Jun. 3, 2008)	2020 TR LANL-00857 to 00943
LANL Exhibit 51	US EPA Guidelines Water Quality Criteria	2020 TR LANL-00944 to 01003
LANL Exhibit 52	US EPA Website, How to Get Methods Approved for measuring pollutants for National Pollutant Discharge Elimination System	2020 TR LANL-01004 to 01006
LANL Exhibit 53	Federal Register Notice, 79 Fed. Reg. 49,001 (Aug 19, 2014)	2020 TR LANL-01007 to 01020
LANL Exhibit 54	US EPA Final Aquatic Life Ambient Water Quality Criteria for Aluminum 2018	2020 TR LANL-01021 to 01033
LANL Exhibit 55	EPA Record of Decision Addendum (2011)	2020 TR LANL-01034 to 01039
LANL Exhibit 56	R. Gallegos Presentation	2020 TR LANL-01040 to 01057

The above-listed exhibits are included with this Notice of Intent.

Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I hereby certify that on May 3, 2021, a true and correct copy of the foregoing *Notice of* Intent to Present Technical Testimony was served via electronic mail to the following:

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